Data Sheet

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FUJITSU COMPUTERS SIEMENS

PRIMERGY RX300 S2

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Dual Socket / Dual-Core 2U Xeon™ based Rack Server – Compact capacity in central service to your departments

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PRIMERGY RX servers are perfect answers for an IT strategy that seeks to downsize data center infrastructure costs by enhancing transparency of structure, management overhead and maximizing the use of investments.

With RX rack servers and the PRIMECENTER rack enclosures, you benefit from our renowned experience in data center technology, which assures the best quality of data center operation. To guarantee heterogeneous data center assets, the PRIMECENTER modular design accommodates seamless integration of PRIMEPOWER compute nodes, storage SAN and NAS subsystems, as well as other infrastructure components such as hubs, KVM switches and more, using a universal power circuit structure.

Cost-effective scaling, simplified operation and enhanced quality of data center IT production are the main benefits in deploying PRIMERGY RX servers. Their centralized PRIMERGY Server View Suite management functions mean less troubleshooting and costs and remote access from anywhere at any time. The flexible custom supply model and our build-to-order process means that only fully built and pre-tested rack solutions are shipped to the customer – shortening your time to production.

PRIMERGY RX300 S2

PRIMERGY RX300 S2 rack server pack the capacity of a fully-featured departmental server into a rack design only 2 U in height. It is offering the breakthrough performance features of leading edge Dual-Core CPUs embedded in a powerful design with dual channel SCSI and fast PCI busses. Expandability is covering for nearly any workload: 16 GB memory, up to 6 SCSI hard disk drives, and sufficient free PCI slots for heavy I/O requirements.
To guarantee its high availability level, PRIMERGY RX300 S2 delivers: redundant hot-plug power supplies and fans, Hot-plug hard disk drives and PCI cards and onboard RAID. Special attention is given to secure memory data, with Chipkill, hot spare and memory mirroring. The new „Cool-safe™“ technology secures optimal temperatures even at peak workloads, such ensuring longevity and extended Mean Time Between Failures. With this built-in failsafe functionality PRIMERGY RX300 S2 is suited ideally to meet demands for continuous operation in business critical environments, running data bases, terminal services, business applications or consolidation and virtual machine tasks.

Key Features	Benefits
▪ Dual socket system with latest Dual Core Xeon™ processor in a design for top performance ▪ 64-bit Intel Xeon EM64Technology and up to 16 GB interleaved memory for demanding applications ▪ PCI-Express attached onboard 2x Gbit/s Ethernet LAN and SCSI/RAID controllers	▪ High computing power combined with balanced I/O and storage features. Ideal for database computing. ▪ 64-bit computing for demanding applications, with full compatibility for 32 bit legacy applications
▪ Internal 6x 300 GB HDD, up to 16 GB memory, up to 5 PCI-X slots, hot-plug tape option	▪ High expandability for consolidation of data and applications.
▪ Hot-plug, redundant power supply and fans options, Hot-plug PCI-X and hard disk drives, Raid 5 onboard ▪ Hot-spare memory and memory mirroring support	▪ No-break repair service saves cost, reduces planned and unplanned downtimes ▪ Comfort and security for continuous operation

Type	Dual Processor/Socket Rack Server
System board	D 1889 / D 2089 (only for Dual-Core)
Chip set	Intel® E7520
Processors	64-bit Intel® Xeon™ (1 - 2)
Frequencies (GHz)	2.80,3.00,3.20,3.40,3.60, 3.80 / Dual-Core 2.80
Front-Side-Bus	800 / 800 MHz
Second-Level-Cache	2 Mbyte / 2x 2 MB, ECC
Memory	1 Gbyte up to max. 16 Gbyte
2-way interleaved, registered ECC DDR2-400 SDRAM; 4 banks with 2 slots each for PC2-3200 modules with 512, 1 and 2 Gbyte; Memory Scrubbing, Chipkill™, Hot-spare Memory option and Memory Mirroring option	
Flash-EPROM	
Local BIOS update with floppy disk; Remote BIOS-Update via LAN with Global Flash and service partition or through chipDISK/RTDS via modem	
Interfaces	
Serial	1x RS-232-C (9-pin) (usable for BMC or OS or shared)
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Parallel (option)	Centronics, 25-pin, EPP/ECP comp.
Keyboard, Mouse	2x PS/2
USB 2.0	2x front, 2x back; (OHCI, 480 Mbit/s)
Graphics	1x VGA (15-pin)
LAN	2x RJ45
SCSI (option)	external Ultra320 SCSI, 68-pin
Front Panel	
On/off switch; NMI-, reset button; LEDs for system status (amber), identification (blue), hard disks access (green), power (amber/green); (back: system status, identification)	
Onboard controller **	
IDE (ATA100)	for 1 x CD / DVD plus 1 x RemoteView
SCSI (LSI53C1030)	2-channel Ultra320 SCSI with RAID level 1 (Integrated Mirroring Enhanced also for odd numbered HD´s) (for Windows and Linux)
MegaRaid PCI Express™ RoMB (options)	RAID level 0, 1, 10, 5, 50 extension for onboard SCSI/RAID controller with 256 MB, or 128 MB / 256 MB RAID cache (both with ITBBU) and iButton enable key
LAN (BroadCom5721)	2x 10/100/1000 Mbit/s Ethernet (PCE-Boot via LAN from PXE server)
Graphics	ATI Rage XL 8 MB
Server management	Baseboard Management Controller (BMC), IPMI 1.5 compatible
Hard disk drives	36, 73, 146, 300 Gbyte,U320 SCSI
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
I/O Slots (Standard)	
3 x PCI-X 64-bit / 100 MHz, low profile; 3.3 V (with IOOP™ bus 1 x 133MHz if only slot 3 is used) 2 x PCI-X 64-bit / 133 MHz, low profile; 3.3 V hot-plug	
I/O Slots (risercard option)	
1 x PCI-X 64-bit / 100 MHz, long, full height; 2 x PCI-X 64-bit / 100 MHz, short, full height	
Drive bays	
for hard disks	6x 3.5/1-inch, slide-in chassis; over 1 or 2 SCSI channels (option)
for accessible drives	1x 5.25/0.5-inch, for CD or DVD; 1x 3.5/0.5-inch, for FD drive or LocalView display option
for optional accessible drives	1x 3.5/2-inch for hot-plug tape drive, requires 2 hard disk bays
System fan units (hot-plug)	
Standard / redundant (option): 1 + 1 units, 4 fans each	

Electrical values	
1x Hot-plug power supply unit as standard. Additional hot-plug unit for redundancy option	
Output power	600 W / 1 + 1 x 600 W each
Rated voltage range	100 - 240 V
Rated frequency	50-60 Hz
Max. rated current	100 V - 240 V / 8 A – 3 A
Rated current in basic configuration	100 V - 240 V / 4.2 A - 1.4 A
Active power	681 W
Apparent power	689 VA
Heat emission	2452 kJ/h (2324 btu/h)
Temperature/Noise/Dimension/Weight	
Ambient temperature	10°C - 35°C (EN60721-3-3 class 3K2)
Sound pressure L_{pAm}	<= 57 dB (A) (ISO9296)
Sound power L_{WAd}	<= 7.1 B (ISO9296)
Overall measures	85.9 * 482.6 * 785 (mm); (HxWxD)
Rack mount depth / U: Rack cable depth:	745 mm / 2 U, 100 mm (900mm Rack recommended)
Rack integration kit	inclusive telescopic rails as part of the standard delivery
Weight	~ 25 kg (configuration dependent)
Compliance with Norm and Standards	
Product safety	
Global / Europe	IEC 60950-1 / EN 60950-1
USA	UL 60950 3rd. Ed.
Canada	CAN/CSA-C22.2 No. 60950 3rd. Ed.
Electro magnetic compatibility	
Europe	EN 55 022 class A, EN 55024, EN 61000-3-2 / -3-3
Taiwan / Japan	BSMI class A; VCCI class A /JEIDA
Australia / New Zealand	C-Tick class A
USA / Canada	FCC class A
Declaration of conformity	
Europe (CE)	89/336/EEC(EMV);73/23 EEC(LVD)
North America	FCC class A
Approvals	
Product safety	
Global / Europe	CB / CE
USA / Canada	CSA_{US} / CSA_{C}
There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons, can be applied for on request.	
Supported operating systems	
Microsoft: Windows 2003 Standard, Enterprise IA32 Edition; Microsoft: Windows 2003 Standard, Enterprise x64 Edition; Microsoft Windows 2003 Web Edition Microsoft: Windows 2000 Advanced Server; Server Novell: NetWare 6.5 VMware: ESX Server 2.5.2 SCO: UnixWare 7.1.4; Open Server 5.0.7 SUSE: Enterprise Server 8 for X86 and 9 x86 / EM64T Linux 9.1, 9.3 for X86 Red Hat: Enterprise Linux 2.1; 3 and 4 for X86 / EM64T	
** For supported controllers (onboard and PCI cards for SCSI, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.	
Server Management (see separate data sheets)	
Standard:	PRIMERGY ServerView Suite; PDA, ASR&R
Optional:	RemoteView with IDE chipDISK and RemoteView Service Board (RSB S2)

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